



# Liver Cancer Hepatocellular Carcinoma (HCC)

## What is hepatocellular carcinoma (HCC)?

*Hepatocellular carcinoma* is the most common type of liver cancer. The exact cause of HCC is unknown. Viruses such as hepatitis B and hepatitis C have been shown to increase the risk of HCC.

## What are the risk factors for HCC?

Some factors that are associated with increased risk of HCC include

- *cirrhosis* (scarring of the liver tissue)
- infection with hepatitis B virus (HBV) or hepatitis C virus (HCV)
- older age
- male gender
- advanced liver disease
- alcohol use

## What are the symptoms of HCC?

Symptoms are not always present. If you have liver disease and any of the following symptoms, talk with your health care provider right away:

- A hard or sensitive lump just below your ribs on the right side
- Pain in the upper part of your stomach on the right side
- Pain near your right shoulder blade
- Yellowing of the skin, eyes or mucous membranes (called *jaundice*)

## How will my health care provider know if I have HCC?

Health care providers screen patients with liver disease, especially those who have cirrhosis, for HCC. Your health care provider will know if you have HCC based on

- a physical exam
- a liver biopsy
- blood tests
- X-rays such as ultrasound, CAT scan or MRI



## What is the treatment for HCC?

The type of treatment depends on how early the cancer is caught. Surgery, to remove the cancer, offers the best chance at cure. However, surgery may not be right for everyone. Other treatments include

- **liver transplant:**  
replacing a diseased liver with all or part of a healthy liver
- **systemic chemotherapy:**  
medicine given generally to destroy the tumor and stop the tumor from growing or spreading
- **intra-arterial embolization:**  
the blockage of blood flow and nutrients to the tumor by creating a barrier in the hepatic artery
- **intra-arterial chemotherapy:**  
medicine given locally through the hepatic artery to destroy the tumor
- **cryosurgery:**  
the freezing of the tumor to stop its growth
- **percutaneous ethanol injection (PEI):**  
an injection of alcohol into the tumor to stop its growth
- **radio frequency thermal ablation:**  
the use of heat from lasers and high frequency radio waves to destroy the tumor

## How can I prevent HCC?

The best way to prevent HCC is to protect yourself from hepatitis B and hepatitis C. If you already have hepatitis B or hepatitis C, learn how to keep your liver healthy. Here are some suggestions:

- If you have hepatitis C, get vaccinated against hepatitis B
- If you have hepatitis B, learn how to prevent hepatitis C
- Avoid alcohol or drugs
- Keep your liver appointments
- Ask your health care provider about screening for HCC
- Avoid medicines that may damage your liver
- Talk with your VA health care provider about treatments for hepatitis B and hepatitis C

## Who can I call for more information?

- **Your local VA medical center**  
and visit <http://www.va.gov/hepatitis>
- **The Centers for Disease Control & Prevention (CDC)**  
(888) 4HEPCDC [(888) 443-7232] and visit <http://www.cdc.gov/ncidod/diseases/hepatitis>
- **The National Cancer Institute**  
Public inquiries Office  
Building 31, Room 10A03  
31 Center Drive, MSC 2580  
Bethesda, Maryland 20892-2580  
(301) 435-3848  
and visit <http://www.nci.nih.gov>